

Florida harvester ants regularly relocate

November 19 2014



The old ant nest is in the background, and the new nest is in the foreground.
Credit: Walter R. Tschinkel

Florida harvester ants move and construct a similar subterranean nest about once a year, according to a study published November 19, 2014 in the open-access journal *PLOS ONE* by Walter Tschinkel from Florida State University.

The Florida harvester ant excavates up to 2 meter deep nests in the sandy soils of the Gulf and Atlantic coastal plains. Scientists tracked and mapped nest relocations of over 400 [colonies](#) in a north Florida coastal plains pine forest from 2010 to 2013 and monitored the progress of entire relocations of 20 of these nests.

The researchers found that the architecture of old and new nests was very similar. The entire relocations were completed in 4 to 6 days and averaged 4 m, with few moves exceeding 10 m. A minority of workers carried seeds, charcoal, and brood, with the proportion of workers carrying large loads increasing throughout the move. Individual colonies varied from one move in two years to four times a year, averaging about one per year. Measured from year to year, small colonies gained size and large ones lost it, but colonies moving more than once in two years lost more than those moving less often, suggesting that moving may bear a cost for ant survival and reproduction.

The researchers posit that relocation is probably intrinsic to the life history of this species, but understanding the causes of relocation will require further research.

More information: Tschinkel WR (2014) Nest Relocation and Excavation in the Florida Harvester Ant, *Pogonomyrmex badius*. PLoS ONE 9(11): e112981. [DOI: 10.1371/journal.pone.0112981](https://doi.org/10.1371/journal.pone.0112981)

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